

Engineering and Operations Workgroup Study Plans

Study #1a: Statewide Operations
Model Development

November 16, 2001

Goals

- Develop appropriate statewide operation model
- Integrate into the overall modeling scheme
- Perform benchmark simulations

Task 1. Define desired outputs from model

- Includes:
 - Monthly Oroville release
 - Monthly Oroville storage Level
 - Monthly Feather River flow below Thermalito return
 - SWP/CVP water supply delivery
 - Other statewide operation results

Task 2. Review existing models

- CALSIM II
 - Jointly developed and verified by DWR/USBR the SWP and CVP operators respectively
 - Will be used in numerous other processes such as CALFED
 - Covers desired area
 - Produces required outputs
 - Replaces all other known existing models

Task 3. Review existing data

- Not applicable

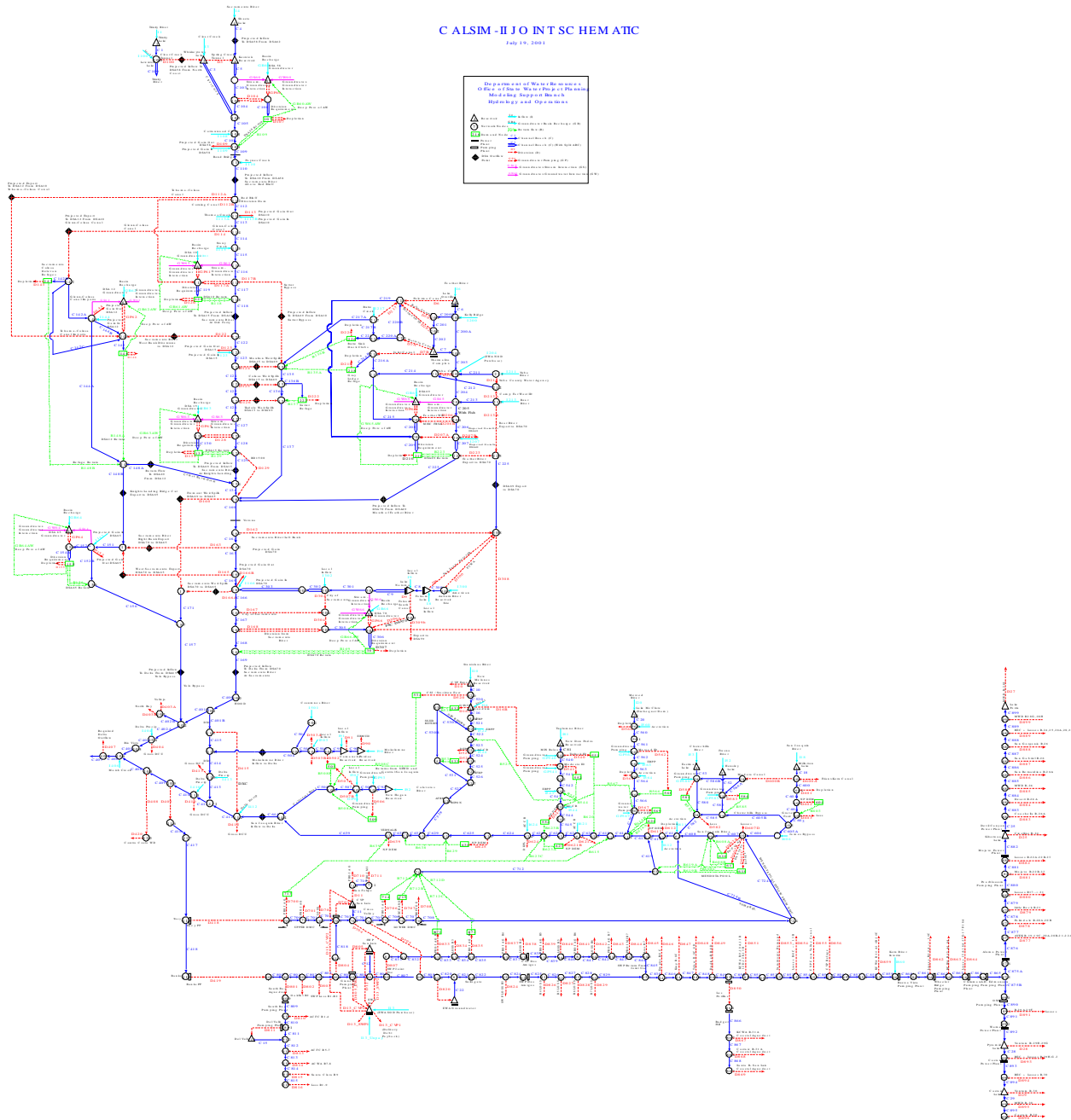
Task 4. Review modeling tools

- Not applicable

Task 5. Select appropriate model or modeling tool

- CALSIM II model will be used

July 19, 2001



Task 6. Collect field data for development, calibration, and verification

- Not Applicable

Task 7. Model Development, Calibration, and Verification

- The CALSIM II model will already be developed and verified for the statewide CVP/SWP system by DWR-USBR.
- Obtain CALSIM II model and required supporting software
- Verify CALSIM II installation on PC

Task 8 – Integrate into modeling scheme

- Use definitions from Study Plan 1, Tasks 1 and 5
- Finalize transfer utilities and process

Task 9. Perform benchmark simulations

- Obtain initial benchmark simulations from DWR website when available
- Modify as required to include process specific assumptions from Study 1, Task 1
- Perform the actual CALSIM II simulations
- Use utility programs to load data into central modeling database

Products

- Statewide operation simulation model
- Benchmark statewide operation simulation results